DOCUMENT RESUME

ED 195 707 CE 027 219

AUTHOR Hillson, John; Hagee, Gale
TITLE Study to Determine Influencing Factors for Selecting Agricultural Education as a Career. Final Report.
INSTITUTION Virginia Polytechnic Inst. and State Univ., Blacksburg. Div. of Vocational-Technical Education.
PUB DATE 80
NOTE 39p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Agricultural Education; Background; *Career Choice; Decision Making; Educational Research; Females; Higher Education; *Influences; Males; School Role; *Socioeconomic Influences; State Surveys; Teacher Attitudes; Teacher Education; Teacher Employment; *Teacher Influence; Teacher Shortage; Teaching (Occupation); Undergraduate Students; *Vocational Education Teachers; Work Experience
IDENTIFIERS Virginia

ABSTRACT

A descriptive research study was conducted to determine those factors influencing people to select a career in agricultural education. Undergraduate students majoring in agricultural education at Virginia Tech and randomly chosen Virginia vocational agriculture teachers were surveyed by the use of a project-developed instrument. Among the findings of the study was that the categories of high school influences and instructor influences had greater impact on males. The category of personal reasons had greater impact on females. The four categories of previous work experience, economic/social, high school influences, and instructor influence were significantly different for various types of majors. The categories displaying the greatest significant difference for years of enrollment in vocational agriculture were high school influences and instructor influences. In addition, it was found that subjects with a major in agricultural education chose a career in agricultural education at a younger age than any other college major classification. The two most influential categories for all subjects in choosing a career in agricultural education were economic/social and personal reasons. (The survey instrument is appended.) (LRA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED195707

A STUDY TO DETERMINE INFLUENCING FACTORS FOR SELECTING AGRICULTURAL EDUCATION AS A CAREER

John Hillison
Gale Hagee

Agricultural Education Program
Vocational & Technical Education Division
College of Education

Virginia Tech
Blacksburg, Virginia 24061

1980

Final Report

CE027215

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

John Hillison

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Introduction

The vocational field of agricultural education has long been plaqued with a shortage of teachers. Nationally, there were 144 additional teachers needed by high school vocational agriculture departments in 1979. An additional 499 vocational agriculture teachers were employed with temporary or emergency certificates (Craig, 1980). The same study indicated that the shortage will probably continue throughout the 80's.

One long term procedure to assist in alleviating the problem of a shortage of vocational agriculture teachers is to recruit additional students into agricultural education teacher preparation programs. Before that procedure can be effectively implemented, it is important to identify those factors which most influence a decision for choosing a career in agricultural education. It is also important to identify and provide appropriate career guidance information to prospective teachers.

Purpose and Objectives

The major purpose of this study was to determine those factors influencing people to select a career in agricultural education. A secondary purpose was to establish a baseline for evaluating a newly established recruitment program at Virginia Tech. The specific objectives for the study were:

1. To determine the difference in influencing factors between pre-service students and teachers for selecting agricultural education as a career.
2. To determine the difference in influencing factors between males and females for selecting agricultural education as a career.
3. To determine the difference in influencing factors among the holders of different types of certificates at the time of graduation for selecting agricultural education as a career.
4. To determine the difference in influencing factors among option area specialists for selecting agricultural education as a career.
5. To determine the difference in influencing factors among types of major for selecting agricultural education as a career.

6. To determine the difference in influencing factors by years of enrollment in vocational agriculture for selecting agricultural education as a career.

7. To determine the difference in influencing factors by years of membership in the FFA for selecting agricultural education as a career.

8. To determine the difference in influencing factors by amount of participation in undergraduate collegiate organizations for selecting agricultural education as a career.

9. To determine the age for selecting agricultural education as a career as influenced by type of certificate received at graduation and years of enrollment in vocational agriculture.

The null hypothesis statements established were:

1. There is no statistical difference in influencing factors between pre-service students and teachers for selecting agricultural education as a career.

2. There is no statistical difference in influencing factors between males and females for selecting agricultural education as a career.

3. There is no statistical difference in influencing factors among the holders of different types of certificates at the time of graduation for selecting agricultural education as a career.

4. There is no statistical difference in influencing factors among option area specialists for selecting agricultural education as a career.

5. There is no statistical difference in influencing factors among types of major for selecting agricultural education as a career.

6. There is no statistical difference in influencing factors by years of enrollment in vocational agriculture for selecting agricultural education as a career.

7. There is no statistical difference in influencing factors by years of membership in the FFA for selecting agricultural education as a career.

8. There is no statistical difference in influencing factors by amount of participation in undergraduate student organizations for selecting agricultural education as a career.

9. There is no statistical difference by major for the age at which subjects choose to select a career in agricultural education.

10. There is no statistical difference by years of enrollment in vocational agriculture for the age at which subjects choose to select a career in agricultural education.

All null hypothesis statements were tested at the .05 level of alpha.

Literature Review

As early as 1969 Woodin documented the fact that nationally vocational agriculture suffers from a shortage of teachers. That problem persisted throughout the decade of the 1970's and has continued into the 1980's (Craig, 1980). Craig also found that while a sufficient number of students graduate from teacher education programs every year, less than 60 percent choose to enter teaching as a career.

In addition to low initial placement in teaching, a second reason for the shortage of vocational agriculture teachers is a relatively low retention rate. When Knight (1977) examined reasons why high school teachers left the field between 1970 and 1975 he found that: (1) teachers' long range occupational goals differed from high school teaching, (2) a lack of student interest, (3) inadequate advancement opportunities, (4) long hours, and (5) inadequate salary. Allen (1976) determined, on the average, Oregon vocational agriculture teachers taught less than five years. He found that teachers leaving the field left for the three composite reasons of salary (27 percent), did not have enough time for their families (38 percent), and to enter school administration (49 percent).

A limited amount of research has been conducted on recruitment activities and their effectiveness. Evans (1971) found that vocational agriculture teachers were the most influential factor for students selecting agricultural education as a major. Evans found that while they were enrolled in vocational agriculture, students who decided to enter teaching had received more home visits than those not selecting to teach.

Parent's influence, working with youth, and the opportunity to work with livestock have been found to be important recruitment points (Fletcher, 1974). In addition, Fletcher found that salary and the opportunity to farm ranked low as influencing factors.

Luft (1974) found that 37 percent of the students enrolled in agricultural education teacher preparation programs had taken four years of vocational agriculture. Few of the agricultural education students in his study had a farm background. In addition, Luft found that common recruitment practices were: (1) personal interviews with an agricultural education professor, (2) university tours, (3) teaching units on opportunities in agricultural education, (4) displays and (5) brochures.

Methodology

The study utilized descriptive survey research methodology. Undergraduate students majoring in agricultural education at Virginia Tech and randomly chosen Virginia vocational agriculture teachers were surveyed by the use of a project developed instrument.

Instrumentation

The first step in developing the project instrument was to collect a series of statements from agricultural education students describing why they had selected that major for a career. The statements were reviewed by an instrument development team composed of graduate students in agricultural education or vocational education. The team reviewed the statements for clarity and duplication. The team consolidated the initial pool into 27 statements and nine categories. These categories and statements were:

Category	Instrument Statements
Previous Work Experience	My farm background influenced me. I tried other jobs and I liked teaching best. I was influenced by agribusiness (non farm) work experience.

Economic/Social	Agricultural education is a good way to get into other jobs in agriculture. Agricultural education has a lot of geographical mobility. The strong demand for agricultural teachers influenced me.
College Experience	A visit to a university campus while in high school influenced me. The counseling center at the university influenced me. I was impressed with the agricultural faculty at the university.
High School Influences	A school administrator influenced me. A high school guidance counselor influenced me. My experiences as a high school vo-ag student and FFA member influenced me.
Instructor influences	A teacher other than an agricultural teacher influenced me. I was favorably impressed by an agricultural teacher. Other teachers convinced me that it would be exciting to be a teacher.
Friends/Peer Influences	A friend encouraged me. Many of my friends were in agricultural education. A student peer influenced me.
Family/Home Influences	My parents influenced me. A brother or sister influenced me. My spouse encouraged me.
Personal Reasons	I wanted to work with young people. I wanted to be my own boss. I wanted to share an interest in my technical agriculture field with others.
Recruitment Activities	A recruitment brochure influenced me. A college recruitment program influenced me. A slide-tape presentation influenced me.

The instrument was field tested with one class of 12 undergraduate students and 11 randomly selected vocational agricultural teachers. The field test participants were excluded from the sample surveyed. The field test

consisted of a test-retest administration which established reliability correlation coefficients from r = .70 to r = .88, for the categories identified above.

In addition to the previously mentioned 27 items, demographic information was also collected. The demographic data consisted of such information as name, sex, year of graduation, type of major, years of enrollment in vocational agriculture and membership status in the appropriate collegiate agricultural education student organization.

An open ended series of statements was solicited as part of the instrument. These statements were solicited by the direction "Write a brief paragraph stating the most important reasons for deciding to become an agricultural teacher." Please note Appendix A for a copy of the instrument.

Subjects

The subjects participating in the study consisted of two groups. One group was composed of 54 Virginia Tech undergraduate majors enrolled in on-campus agricultural education courses during the fall and winter quarters of the 1979-80 school year.

The second group of subjects was composed of Virginia vocational agriculture teachers. The survey instrument was mailed to 200 vocational agriculture teachers randomly selected from the population of 410 using a systematic sampling procedure. Each subject in the teacher sample received a cover letter co-signed by his or her area supervisor. Please note Appendix B for a sample cover letter. Each teacher subject also received a stick of Big Red chewing gum as an incentive to complete the instrument. A total of 177 teachers responded to the instrument for a return rate of 88.5 percent.

Results

The data were analyzed by use of both descriptive and inferential statistics. Descriptive statistics used were frequency, range and mean. The inferential statistic used was analysis of variance (ANOVA).

Pre-service students and teachers

Table 1 indicates that when pre-service (undergraduate) students were compared to teachers grouped by years since graduation, a number of interesting things can be noted. Three of the influencing factor categories had significant differences. One category was high school influences ($.01<p$) which had the highest rating from teachers who had graduated 11 to 18 years ago (1961-68). The lowest rating was given by teachers who had graduated 1 to 3 years ago (1976-78). The second significant category was instructor influences ($.001<p$) with teachers 11 to 18 years since college graduation (1961-68) rating it highest; teachers one to three years since graduation (1976-78) rated it lowest. The third significant category was friends/peers influences ($.01<p$) with teachers 11 to 18 years since graduation (1961-68) rating it highest. Teachers five to 10 years since graduation (1961-74) rated it lowest.

Males and Females

When males and females were compared three categories were found to be significantly different. Table 2 indicates that males rated the category high school influences significantly higher ($.001<p$) than females. Males gave

Table 1

Means and F Values for Students and Years Since Graduation for Teachers by Categories

Categories	PreService Students n=54	Teachers (1-3 Years) n=51	Teachers (5-10 Years) n=42	Teachers (11-18 Years) n=40	Teachers (19-54 Years) n=43	F
PREVIOUS WORK EXPERIENCE	8.98[a]	10.43	9.86	10.88	12.49	2.41
ECONOMIC/SOCIAL	15.59	15.74	12.88	14.05	1[illegible].79	2.61
COLLEGE EXPERIENCES	9.18	9.49	7.62	11.68	8.77	2.42
HIGH SCHOOL INFLUENCES	10.13	7.37	9.24	12.08	8.51	3.46**
INSTRUCTOR INFLUENCES	10.61	9.80	13.02	14.98	11.63	4.76**
FRIENDS/PEER INFLUENCES	9.33	8.25	5.07	11.03	8.56	3.89**
FAMILY/HOME INFLUENCES	5.65	5.43	5.69	7.35	7.26	1.37
PERSONAL REASONS	14.76	14.14	13.00	14.40	14.07	0.37
RECRUITMENT ACTIVITIES	3.83	3.20	2.45	3.50	3.02	0.65

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

**Significant at .01 < p

***Significant at .001 < p

Table 2

Means and F Values for Males and Females by Categories

Categories	Males n=196	Females n=35	F
PREVIOUS WORK EXPERIENCE	10.81[a]	9.14	2.64
ECONOMIC/SOCIAL	13.93	15.23	1.02
COLLEGE EXPERIENCES	9.15	9.80	0.33
HIGH SCHOOL INFLUENCES	9.93	5.89	12.31***
INSTRUCTOR INFLUENCES	12.19	9.11	6.60*
FRIENDS/PEER INFLUENCES	8.44	8.14	0.50
FAMILY/HOME INFLUENCES	6.53	4.74	3.29
PERSONAL REASONS	13.67	16.57	5.45*
RECRUITMENT ACTIVITIES	3.27	2.97	0.14

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

*Significant at $.05 < p$

***Significant at $.001 < p$

high school influences a mean rating of 9.93, while females rated it 5.89. Males also rated instructor influences significantly higher ($.05<p$) than females. Males gave instructor influences a mean rating of 12.19, while females rated it 9.11. Females rated the category personal reasons significantly higher ($.05<p$) than males. Females gave the category personal reasons a mean rating of 16.57, while males rated it 13.67.

Table 3 illustrates the commonality between the ranking and the means of the 27 items by males and females. This table indicates that the top five influencing factors of each group ranks within the top ten of the other group.

Type of Certificate

No statistically significant differences were found among the holders of various certificate types. The nine influencing categories, their means and F values are displayed in Table 4.

Option Areas

Table 5 indicates the differences found among subjects in the option areas of specialization for Virginia. Statistical difference was found for the categories of high school influences and family/home influences. The option area that gave the highest mean rating to high school influences was agribusiness with a mean rating of 12.93. The lowest rating for high school influences was a mean rating of 0.00 given by the two subjects in the disadvantaged teaching option. The next lowest rating was given by subjects in the horticulture option with a mean rating of 5.71. The highest rating for the category of family/home influences was given by subjects who had a combination of more than one option area with a mean rating of 10.17.

Table 3

Ranking and Means of Instrument Questions by Undergraduates for Males and Females

Questions	Males (n=36)		Females (n=18)	
	Rank	$\bar{X}$	Rank	$\bar{X}$
Q1.FARM BACKGROUND	4	6.31[a]	9	3.50
Q2.GET INTO OTHER JOBS	1	7.53	5	4.78
Q3.VISIT TO UNIV.CAMPUS	14	3.39	16	2.50
Q4.SCHOOL ADMINISTRATOR	15	3.17	14	2.83
Q5.TEACHER OTHER THAN AG	21	1.75	18	2.11
Q6.FRIEND	13	3.61	7	3.78
Q7.PARENTS	11	3.89	14	2.83
Q8.WORK WITH YOUNG PEOPLE	6	5.39	1	7.61
Q9.RECRUITMENT BROCHURE	23	1.39	23	1.22
Q10.TRIED OTHER JOBS,PREFER THIS	24	1.17	21	1.50
Q11.GEOGRAPHICAL MOBILITY	9	4.06	13	2.89
Q12.UNIV.COUNSELING CTR.	26	0.33	20	1.78
Q13.H.S.GUIDANCE COUNSELOR	22	1.50	22	1.39
Q14.AG.TEACHER	3	6.47	6	4.00
Q15.HAD FRIENDS IN AGRIC.	12	3.67	23	1.22
Q16.BROTHER OR SISTER	20	1.78	19	2.00
Q17.OWN BOSS	10	3.92	12	2.91
Q18.COLLEGE RECRUITMENT PROGRAM	19	2.14	26	0.83
Q19.NON-FARM WORK EXPERIENCE	18	2.28	17	2.44
Q20.DEMAND FOR AG TEACHERS	5	5.53	4	4.89
Q21.AG FACULTY AT UNIVERSITY	7	5.33	3	5.17
Q22.H.S.VOAG & FFA EXPER.	2	6.53	7	3.78
Q23.OTHER TEACHERS	16	3.03	11	3.22
Q24.STUDENT PEERS	17	2.59	10	3.28
Q25.SPOUSE	27	0.19	27	0.39
Q26.SHARE AG.INTERESTS W/OTHERS	8	4.94	2	5.22
Q27.SLIDE-TAPE PRESENTATION	25	0.69	25	1.00

[a]Based on a Scale of 0 (least influence) to 10 (greatest influence)

Table 4

Means and F Values for Type of Certificate Initially Held by Categories

Categories	Collegiate n=37	Collegiate Professional n=170	Post-Graduate Professional n=10	F
PREVIOUS WORK EXPERIENCE	10.38[a]	10.50	11.00	0.05
ECONOMIC/SOCIAL	13.46	14.17	16.70	0.83
COLLEGE EXPERIENCES	8.08	9.84	5.80	2.96
HIGH SCHOOL INFLUENCES	9.08	9.19	8.90	0.01
INSTRUCTOR INFLUENCES	11.00	11.87	11.00	0.31
FRIENDS/PEER INFLUENCES	7.95	8.44	9.40	0.17
FAMILY/HOME INFLUENCES	4.57	6.59	4.70	2.53
PERSONAL REASONS	13.43	13.89	16.90	1.04
RECRUITMENT ACTIVITIES	3.24	3.16	3.80	0.11

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

Table 5

Means and F Values for Option Areas by Categories

Categories	Agri-business n=15	Agr. Mach. Service n=33	Agr. Prod. n=82	Disad-vantaged n=2	Explor-atory n=1	Horti-culture n=35	Jr. High n=18	Natural Resource n=15	Combin-ation n=24	F
PREVIOUS WORK EXPERIENCE	9.80[a]	11.58	10.63	9.00	10.00	10.29	8.94	8.07	12.75	1.28
ECONOMIC/SOCIAL	16.67	14.36	13.84	16.50	19.00	12.57	13.17	16.80	14.21	0.89
COLLEGE EXPERIENCES	11.47	8.15	9.71	9.50	0.00	7.49	9.94	9.53	10.75	1.25
HIGH SCHOOL INFLUENCES	12.93	11.21	9.71	0.00	6.00	5.71	11.11	10.53	8.00	3.61***
INSTRUCTOR INFLUENCES	13.07	12.45	12.21	2.00	13.00	9.31	12.00	12.40	12.54	1.41
FRIENDS/PEER INFLUENCES	11.13	7.79	7.46	1.50	9.00	7.80	10.72	7.07	10.79	1.39
FAMILY/HOME INFLUENCES	4.73	6.79	6.07	0.00	7.00	5.29	7.06	4.20	10.17	2.71**
PERSONAL REASONS	12.53	13.55	14.30	18.00	11.00	13.23	14.22	14.80	16.58	0.71
RECRUITMENT ACTIVITIES	3.73	2.82	3.30	0.00	1.00	1.63	5.22	4.67	4.08	1.67

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

**Significant at $.01 \leq p$

***Significant at $.001 < p$

The lowest rating for the category of family/home influences was given by the two subjects in the disadvantaged option with a mean rating of 0.00. The next lowest rating was given by subjects in the natural resource option area with a mean rating of 4.20. Caution must be used in examining the differences in Table 5 because of the influence of the categories receiving a 0.00 rating.

Major

Subjects in the four subsets of agricultural education major, dual major, certification only and not agricultural education major had four categories displaying statistically significant differences at the $.05<p$ level as displayed in Table 6. The subset of not agricultural education major had the highest mean rating in all four significant categories. Subjects who had a dual major rated previous work experience, high school influences and instructor influences lowest. Certification only subjects gave the lowest rating to the economic/social category.

Enrollment in Vocational Agriculture

Table 7 displays four categories that had significantly different F values based on enrollment in vocational agriculture. The category of previous work experience ($.05<p$) had its highest mean rating by subjects who had taken two years of vocational agriculture and its lowest mean rating by those who had one year of vocational agriculture. The category of high school influences ($.001<p$) had its highest mean rating by subjects who had taken five years of vocational agriculture and its lowest mean rating by those subjects who had not taken vocational agriculture. The category instructor influences ($.001<p$) also had its highest mean rating by subjects who did not take vocational

Table 6

Means and F Values for Type of Major Categories

Categories	Agr. Educ. Major n=158	Dual Major n=34	Certification only n=27	Not Agr. Educ. n=7	F
PREVIOUS WORK EXPERIENCE	10.52[a]	9.17	10.48	16.29	3.21*
ECONOMIC/SOCIAL	14.15	14.44	12.07	20.57	2.90*
COLLEGE EXPERIENCES	9.36	10.17	7.11	11.86	1.75
HIGH SCHOOL INFLUENCES	10.09	6.80	7.15	10.14	3.71*
INSTRUCTOR INFLUENCES	12.37	8.62	11.70	14.14	3.43*
FRIENDS/PEER INFLUENCES	8.65	8.12	6.00	12.43	1.84
FAMILY/HOME INFLUENCES	6.75	4.35	5.30	7.43	2.29
PERSONAL REASONS	13.91	14.56	13.11	19.43	1.72
RECRUITMENT ACTIVITIES	3.58	2.71	1.44	3.29	2.16

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

*Significant at .05<p

Table 7

Means and F Values for the Number of Years of Vocational Agriculture Enrollment by Categories

Categories	zero n=68	one n=13	two n=8	three n=26	four n=66	five n=49	F
PREVIOUS WORK EXPERIENCE	9.71[a]	8.23	15.88	10.62	11.02	10.61	2.38*
ECONOMIC/SOCIAL	14.57	13.46	18.00	13.50	13.27	14.37	0.82
COLLEGE EXPERIENCES	8.12	7.69	7.88	9.46	9.92	10.51	1.26
HIGH SCHOOL INFLUENCES	2.94	6.77	10.13	12.42	11.36	14.45	43.70***
INSTRUCTOR INFLUENCES	7.87	12.15	13.25	12.92	14.47	15.06	8.80***
FRIENDS/PEER INFLUENCES	8.28	11.62	13.00	6.27	7.80	8.78	1.77
FAMILY/HOME INFLUENCES	4.69	4.92	4.38	7.77	7.09	6.88	2.49*
PERSONAL REASONS	14.81	11.54	15.50	14.92	13.32	14.20	0.82
RECRUITMENT ACTIVITIES	2.79	2.00	4.00	2.92	3.15	4.18	0.95

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

***Significant at $.001 < p$

*Significant at $.05 < p$

16

agriculture. The category family/home influences (.05<p) had its highest mean rating by subjects who had taken vocational agriculture for three years and the lowest mean rating was given by subjects who had taken vocational agriculture for two years.

Undergraduate students who had taken vocational agriculture rated high school vo-ag and FFA experiences as the most influential factor. The second most influential factor for this group was agriculture teacher influences. By comparison, the undergraduates who did not take vocational agriculture in high school ranked high school vocational agriculture and FFA experience 22nd and agriculture teacher influence 12th. This information is displayed in Table 8.

FFA Membership

When subjects were compared on the basis of number of years of membership in the FFA, four categories were found to be significantly different. The categories of high school influences and instructor influences were significant at the .001<p level. The highest mean rating for both categories was given by subjects who had been members of the FFA for five years. The lowest mean rating for both categories was given by subjects who had not been members of the FFA. The category friends/peer influences was significantly different at the .05<p level. The highest mean rating for this category was given by subjects who had been members of the FFA for two years; the lowest rating was given by subjects who had been members for three years. The fourth significantly different category (.05<p) was family/home influences. Subjects who had been members of the FFA for four years gave this category its highest mean rating, while subjects who had not been members of the FFA gave it its lowest rating. These data are displayed in Table 9.

Table 8

Ranking and Means of Instrument Questions by Undergraduate Students Based on Vocational Agriculture Enrollment While in High School

Questions	Vo-Agr.Taken(n=37)		No Vo-Agr.Taken(n=17)	
	Rank	$\bar{X}$	Rank	$\bar{X}$
Q1.FARM BACKGROUND	4	6.08[a]	8	3.82
Q2.GET INTO OTHER JOBS	3	7.03	2	5.71
Q3.VISIT TO UNIV. CAMPUS	10	3.89	16	1.35
Q4.SCHOOL ADMINISTRATOR	11	3.70	15	1.65
Q5.TEACHER OTHER THAN AG	20	2.16	19	1.24
Q6.FRIEND	11	3.70	9	3.59
Q7.PARENTS	9	4.22	14	2.06
Q8.WORK WITH YOUNG PEOPLE	5	5.92	1	6.59
Q9.RECRUITMENT BROCHURE	23	1.54	23	0.88
Q10.TRIED OTHER JOBS,PREFER THIS	25	0.92	14	2.06
Q11.GEOGRAPHICAL MOBILITY	15	3.22	6	4.65
Q12.UNIV.COUNSELING CTR.	24	1.05	26	0.29
Q13.H.S.GUIDANCE COUNSELOR	21	2.05	27	0.18
Q14.AG.TEACHER	2	7.22	12	2.24
Q15.HAD FRIENDS IN AGRIC.	13	3.54	16	1.35
Q16.BROTHER OR SISTER	19	2.19	21	1.12
Q17.OWN BOSS	14	3.24	7	4.35
Q18.COLLEGE RECRUITMENT PROGRAM	22	1.95	20	1.18
Q19.NON-FARM WORK EXPERIENCE	18	2.41	13	2.18
Q20.DEMAND FOR AG TEACHERS	6	5.54	4	4.82
Q21.AG FACULTY AT UNIVERSITY	7	5.51	5	4.77
Q22.H.S.VOAG & FFA EXPER.	1	7.73	22	1.00
Q23.OTHER TEACHERS	16	3.19	11	2.88
Q24.STUDENT PEERS	17	2.60	10	3.29
Q25.SPOUSE	27	0.19	25	0.41
Q26.SHARE AG.INTERESTS W/OTHERS	8	4.97	3	5.18
Q27.SLIDE-TAPE PRESENTATION	26	0.90	24	0.59

[a]Based on a Scale of 0 (least influence) to 10 (greatest influence)

Table

Means and F Values for the Number of Years of FFA Membership by Categories

Categories	zero n=74	one n=10	two n=9	three n=26	four n=56	five n=44	F
PREVIOUS WORK EXPERIENCE	10.07[a]	9.60	15.11	10.27	11.18	10.27	1.54
ECONOMIC/SOCIAL	14.42	15.00	18.11	13.69	12.64	14.39	1.19
COLLEGE EXPERIENCES	8.73	7.20	8.22	9.12	9.52	9.95	0.48
HIGH SCHOOL INFLUENCES	3.32	7.40	9.11	12.23	11.80	13.39	36.89***
INSTRUCTOR INFLUENCES	7.91	13.20	13.00	12.65	13.23	14.25	8.06***
FRIENDS/PEER INFLUENCES	8.27	12.90	13.78	6.04	8.30	7.73	2.46*
FAMILY/HOME INFLUENCES	4.79	5.70	5.00	7.46	7.63	6.91	2.41*
PERSONAL REASONS	14.69	12.30	14.89	14.66	13.16	13.98	0.52
RECRUITMENT ACTIVITIES	3.35	2.00	3.67	2.50	2.71	3.23	0.44

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

*Significant at $.05 < p$

***Significant at $.001 < p$

Undergraduate Collegiate Organization Participation

Five different categories displayed in Table 10 had significantly different F values. The categories of economic/social and high school influences had significant differences at the .05<p level. Highest rating for these two categories were received from subjects who were active participants in their collegiate organizations, while the lowest rating was given by subjects who did not participate in collegiate organizations. The categories college experiences (.05<p) and recruitment activities (.01<p) displayed significant differences. Active participants gave both categories the highest rating, while subjects with little participation rated them lowest. The category personal reasons had a significant F value at the .05<p level. Subjects who were fairly active participants in collegiate organizations rated personal reasons highest, while subjects with little participation rated it lowest.

Age for Decision

Figure 1 displays a trend among subjects which indicated that the stronger the affiliation with a major in agricultural education, the younger a decision was made to choose a career in the field. Majors in agricultural education decided on the field as a career at a mean age of 18.66, while subjects with a combination of numerous majors chose the field as a career at a mean age of 26.14. Subjects who had a dual major and a technical agriculture major made a decision to choose the field at a mean age of 20.38. Subjects who certified in agricultural education, but had a major in technical agriculture, chose the field at a mean age of 22.96.

The influence of vocational agriculture is displayed in Figure 2. Subjects who enrolled in vocational agriculture for five years had a mean age of 17.61 for choosing the field as a career. This mean age contrasts

Table 10

Means and F Values for Undergraduate Collegiate Organization Participation by Categories

Categories	None n=74	Little Participation n=33	Some Participation n=42	Fairly Active n=30	Active n=38	F
PREVIOUS WORK EXPERIENCE	9.69[a]	10.88	9.38	11.30	12.58	2.40
ECONOMIC/SOCIAL	2.85	13.61	13.14	13.61	16.58	2.62*
COLLEGE EXPERIENCES	8.93	7.45	8.79	10.16	12.26	3.31*
HIGH SCHOOL INFLUENCES	7.86	8.70	10.79	10.73	11.61	3.23*
INSTRUCTOR INFLUENCES	10.57	10.64	11.71	10.03	14.50	2.85
FRIENDS/PEER INFLUENCES	8.24	7.03	7.60	9.50	9.79	0.98
FAMILY/HOME INFLUENCES	6.32	4.73	6.31	6.27	7.47	1.19
PERSONAL REASONS	13.34	12.91	13.00	17.27	15.58	3.09*
RECRUITMENT ACTIVITIES	2.43	2.06	2.64	4.10	5.39	4.55**

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

*Significant at .05 < p

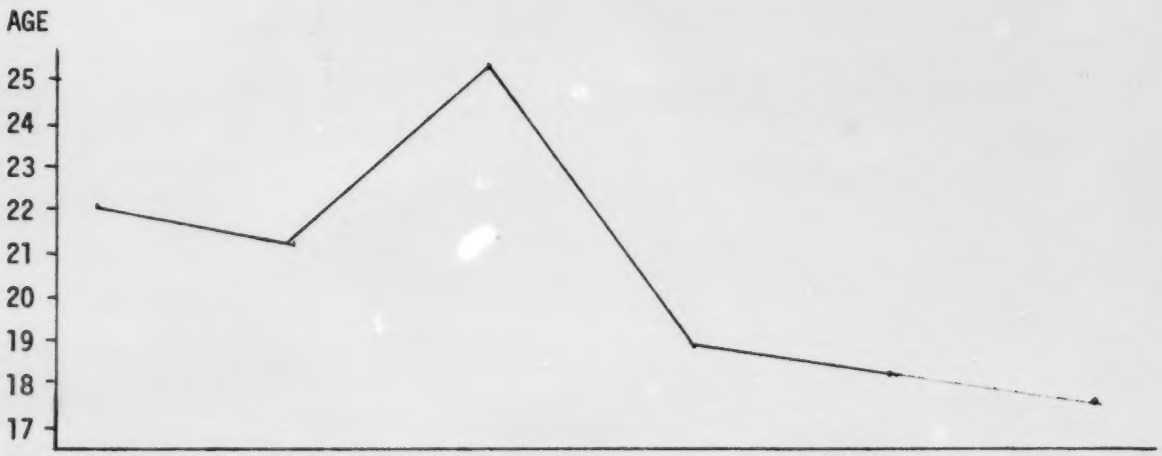
**Significant at .01 < p

Figure 1. Age At Which Decision Made to be an Agricultural Education Teacher By Type Of Major

	AG ED MAJOR	DUAL MAJOR	CERTIFICATION ONLY	COMBINATION
$\bar{X}$ =	18.66	20.38	22.96	26.14

F VALUE = 11.36, .001 < P

Figure 2. Age at Which Decision Made to be an Agricultural Education Teacher by Years Vocational Agriculture Taken While in High School



	ZERO	ONE	TWO	THREE	FOUR	FIVE
$\bar{X}$ =	21.76	21.54	24.63	18.73	18.56	17.61

F VALUE = 6.52, .001 < P

with subjects who did not enroll in vocational agriculture who reported a mean age of 21.76 for career selection. Interestingly, subjects who enrolled in vocational agriculture for two years reported career selection at a mean age of 24.63, the highest for any of the six subsets.

Total by Categories

Table 11 indicates the highest overall grand mean rating by all subjects was given to economic/social (rating of 14.13) and personal reasons (rating of 14.11). The lowest overall mean rating was given to the category of recruitment activities (rating of 3.22).

Table 12 displays the number of reasons stated in an open-ended style by subjects as classified into categories. The highest response was 50 and 47 respectively given as the first reason for the personal reasons and economic/social categories. No subject wrote a statement indicating recruitment activity as the first reason for joining the field of agricultural education.

A total of 80 statements were written as the second reason for joining the field of agricultural education. The most popular category for second reason statements was instructor influences which had 18 statements.

Nineteen subjects wrote statements for their third reason for joining the field of agricultural education. The most popular category for third reason statements was economic/social with six statements.

No pre-service student or teacher described salary as a reason for joining the field of agricultural education. No subject gave teachers' salaries as his or her first, second or third reason for choosing agricultural education as a career.

Table 11

Grand Mean for All Subjects by Categories

Categories	Grand Mean n=231
PREVIOUS WORK EXPERIENCE	10.56[a]
ECONOMIC/SOCIAL	14.13
COLLEGE EXPERIENCES	9.25
HIGH SCHOOL INFLUENCES	9.32
INSTRUCTOR INFLUENCES	11.73
FRIENDS/PEER INFLUENCES	8.39
FAMILY/HOME INFLUENCES	6.25
PERSONAL REASONS	14.11
RECRUITMENT ACTIVITIES	3.22

[a]Based on a Scale of 0 (least influence) to 30 (greatest influence)

Table 12

The Number of Reasons Stated by Subjects for Each Category With Open Ended Statements

Categories	First Reason n	Second Reason n	Third Reason n
PREVIOUS WORK EXPERIENCE	9	4	3
ECONOMIC/SOCIAL	47	16	6
COLLEGE EXPERIENCES	11	7	1
HIGH SCHOOL INFLUENCES	29	10	1
INSTRUCTOR INFLUENCES	32	18	2
FRIENDS/PEER INFLUENCES	3	2	0
FAMILY/HOME INFLUENCES	13	12	3
PERSONAL REASONS	50	10	3
RECRUITMENT ACTIVITIES	0	1	0
NO REASON GIVEN	37	151	212
TOTAL	231	231	231

Summary and Conclusions

1. Pre-service students chose a career in agricultural education for the same reasons as teachers.

2. The categories of high school influences and instructor influences had greater impact on males; the category of personal reasons had greater impact on females.

3. The nine categories did not have a statistically different impact on the holders of the various certificates available.

4. Statistically significant differences were found for the categories of high school influences and family/home influences when examined by option areas; however, caution must be used because of extremely low sample size in two option areas.

5. The four categories of previous work experience, economic, social, high school influences and instructor influence were significantly different for various types of major.

6. The categories displaying the greatest significant difference for years of enrollment in vocational agriculture were high school influences and instructor influences.

7. The categories displaying the greatest significant difference for years of membership in the FFA were high school influences and instructor influences.

8. The more active subjects were in their collegiate organizations, the higher they rated the nine categories as influencing factors.

9. Subjects with a major in agricultural education chose a career in agricultural education at a younger age than any other college major classification.

10. Students who enrolled in vocational agriculture for five years, chose a career in agricultural education at a younger age than students enrolled in vocational agriculture for a fewer number of years.

11. The two most influential categories for all subjects in choosing a career in agricultural education were economic/social and personal reasons.

12. Salary of vocational agriculture teachers was not identified as an important influencing factor for choosing the profession as a career.

13. Adequate career information was obtained from undergraduates and teachers to describe career influencing factors to prospective teachers.

14. A baseline for evaluation of the impact of the newly established recruitment program at Virginia Tech has been established.

Recommendations

1. A longitudinal study should be launched using baseline data collected from this study to evaluate the impact of the Virginia Tech recruitment program.

2. All vocational teacher preparation programs should conduct similar studies to determine career influencing factors for their majors.

3. Career information from this study should be shared with prospective majors.

4. Further study should be made to identify non vocational agriculture students who are potential majors in agricultural education.

Implications for Recruitment Activities

1. Students who enrolled in vocational agriculture and belonged to the FFA can be appealed to through those experiences to choose agricultural education as a career.

2. Students who did not enroll in vocational agriculture or belong to the FFA can be recruited by use of such personal reasons as working with young people, being one's own boss, and sharing an interest in agriculture.

3. Actively involving undergraduate students in appropriate collegiate organizations can assist in the recruitment process.

4. Recruitment efforts should be aimed primarily at prospective teachers earlier than the usual decision-making age of 17 and higher.

5. Salary should not be overly emphasized when recruiting prospective agricultural education majors.

References

Allen, S. "A Study to Determine Why the Average Length of Service for Secondary Vocational Teachers in Oregon Is Less Than Five Years." M.S. thesis, Oregon State University, 1976.

Craig, David, G. A Study of Fifteen-Year Trends of the Supply and Demand of Vo-Ag Teachers in the United States. Agriculture Teachers Directory, 1980, 70, 74-75.

Evans, W. A Study to Determine Some Relevant Factors That Influence High School Students in Alabama to Become Teachers of Vocational Agriculture. Unpublished M.S. thesis, Alabama A & M University, 1971.

Knight, J. Why Vocational Agriculture Teachers in Ohio Leave Teaching. Unpublished doctoral dissertation, The Ohio State University, 1977.

Luft, V. Development of Guidelines for Recruitment Programs in Agricultural Education. Unpublished doctoral dissertation, The Ohio State University, 1974.

APPENDICES

APPENDIX A

VIRGINIA
AGRICULTURAL EDUCATION

1. NAME _____

2. SEX _____

3. YEAR OF COLLEGE GRADUATION _____

4. UNIVERSITY GRANTING DEGREE _____

5. CERTIFICATE RECEIVED UPON GRADUATION
   _____Collegiate
   _____Collegiate Professional
   _____Post Graduate Professional

6. OPTION AREA (CIRCLE MOST DOMINANT OPTION AREA)

   1. Agribusiness
   2. Agricultural Machinery Service
   3. Agricultural Production
   4. Disadvantaged
   5. Exploratory
   6. Horticulture
   7. Junior High School
   8. Natural Resources Management

7. INCLUDING THIS YEAR, HOW MANY YEARS HAVE YOU TAUGHT AGRICULTURAL EDUCATION?_____

8. MAJOR _____ AGRICULTURAL EDUCATION
   _____ DUAL MAJOR, AGRICULTURAL EDUCATION AND _____(second major)
   _____ CERTIFICATION ONLY, MAJOR _____

9. NUMBER OF YEARS ENROLLED IN JUNIOR OR SENIOR HIGH SCHOOL AGRICULTURAL EDUCATION
   _____ NUMBER OF YEARS A MEMBER OF THE FFA _____
   HIGHEST DEGREE OF FFA MEMBERSHIP
   _____ GREENHAND
   _____ CHAPTER FARMER
   _____ STATE FARMER
   _____ AMERCIAN FARMER

10. MEMBERSHIP STATUS IN COLLEGIATE AGRICULTURAL EDUCATION SOCIETY OR COLLEGIATE FFA CHAPTER.
    _____NOT A MEMBER
    _____MEMBER, LITTLE PARTICIPATION
    _____MEMBER, SOME PARTICIPATION
    _____MEMBER, FAIRLY ACTIVE PARTICIPATION
    _____MEMBER, ACTIVE PARTICIPATION

11. AT WHAT AGE DID YOU DECIDE TO BECOME AN AGRICULTURAL EDUCATION TEACHER? _____

AGRICULTURAL EDUCATION
Influencing Factors Instrument

Circle the number indicating how much influence the following factors had upon your decision to enter the field of Agricultural Education. The scale ranges from 1 (a little influence) to 10 (a great deal of influence). If the factor had no influence, circle NA (no influence).

		Not Applicable	A little								A Great Deal
1.	My farm background influenced me	NA	1	2	3	4	5	6	7	8	9 10
2.	Agricultural Education is a good way to get into other jobs in agriculture	NA	1	2	3	4	5	6	7	8	9 10
3.	A visit to a university campus while in high school influenced me	NA	1	2	3	4	5	6	7	8	9 10
4.	A school administrator influenced me	NA	1	2	3	4	5	6	7	8	9 10
5.	A teacher other than an agricultural teacher influence me	NA	1	2	3	4	5	6	7	8	9 10
6.	A friend encouraged me	NA	1	2	3	4	5	6	7	8	9 10
7.	My parents influenced me	NA	1	2	3	4	5	6	7	8	9 10
8.	I wanted to work with young people	NA	1	2	3	4	5	6	7	8	9 10
9.	A recruitment brochure influenced me	NA	1	2	3	4	5	6	7	8	9 10
10.	I tried other jobs and I liked teaching best	NA	1	2	3	4	5	6	7	8	9 10
11.	Agricultural Education has a lot of geographical mobility	NA	1	2	3	4	5	6	7	8	9 10
12.	The counseling center at the university influenced me	NA	1	2	3	4	5	6	7	8	9 10
13.	A high school guidance counselor influence me	NA	1	2	3	4	5	6	7	8	9 10
14.	I was favorably impressed by an agricultural teacher	NA	1	2	3	4	5	6	7	8	9 10
15.	Many of my friends were in Agricultural Education	NA	1	2	3	4	5	6	7	8	9 10
16.	A brother or sister influenced me	NA	1	2	3	4	5	6	7	8	9 10
17.	I wanted to be my own boss	NA	1	2	3	4	5	6	7	8	9 10
18.	A college recruitment program influenced me	NA	1	2	3	4	5	6	7	8	9 10
19.	I was influenced by agribusiness (non farm) work experience	NA	1	2	3	4	5	6	7	8	9 10
20.	The strong demand for agricultural teachers influenced me	NA	1	2	3	4	5	6	7	8	9 10
21.	I was impressed with the Agricultural faculty at the university	NA	1	2	3	4	5	6	7	8	9 10
22.	My experiences as a high school vo-agr. student and FFA member influenced me	NA	1	2	3	4	5	6	7	8	9 10
23.	Other teachers convinced me that it would be exciting to be a teacher	NA	1	2	3	4	5	6	7	8	9 10
24.	A student peer influenced me	NA	1	2	3	4	5	6	7	8	9 10
25.	My spouse encouraged me	NA	1	2	3	4	5	6	7	8	9 10
26.	I wanted to share an interest in my technical agriculture field with others	NA	1	2	3	4	5	6	7	8	9 10
27.	A slide-tape presentation influenced me	NA	1	2	3	4	5	6	7	8	9 10

Write a brief paragraph stating the most important reasons for deciding to become an Agricultural Teacher.

THANK YOU

APPENDIX B

COLLEGE OF EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DIVISION OF VOCATIONAL & TECHNICAL EDUCATION

The Agricultural Education Programs at Virginia Tech and Virginia State are launching an extensive campaign to recruit additional teachers into the field of Agricultural Education. We are participating in numerous activities such as (1) Developing and using a recruitment slide-tape presentation, (2) Developing and using a recruitment brochure, (3) Participation with a recruitment booth at the State Fair of Virginia, and (4) Recruitment meetings at Area Agricultural Education Meetings.

As part of our total recruitment effort, we also hope to find out the influencing factors behind a decision to become an Agricultural Education Teacher. You would provide a great service to our recruitment project if you complete the attached information sheet and send it back as soon as possible. Please use the enclosed self-addressed and stamped envelope for returning the information sheet.

Yours truly,

John Hillison

John Hillison
Associate Professor
Agricultural Education

Stanley R. Burke
Assistant Supervisor
Agricultural Education
Blue Ridge Area

JH:bjf
Enclosure